Potamogeton obtusifolius Mertens & Koch

blunt-leaf pondweed

Potamogetonaceae (Pondweed Family)

Status: State Sensitive
Rank: G5S2

General Description: Adapted from Douglas (2001): This aquatic herb is a perennial, arising from fine, tufted roots. The sparsely branched stems are up to 39 in. (100 cm) long. All the leaves are submerged, with their sides parallel to each other. The olive green leaves are linear with rounded tips, soft, 1 1/8 to 3 1/8 in. (3-8 cm) long by 1/16 to 1/8 in. (2-4 mm) wide, and usually with 3 to 5 veins. There are ¼ to ¾ in. (.5-2 cm) long greenish or brownish leaf-like appendages at the base of the leaves (stipules) that have overlapping margins. The spikes of the inflorescence are ¼ to 2/3 in. (.5-1.5) cm long, with 3 to 8 whorls of flowers on top of thin stalks. The egg-shaped fruits contain a single seed, and are 1/8 in. (3-4 mm) long by 1/16 in. (1.5 to 2.5 mm) wide, with the widest portion above the middle, and roundly or obscurely keeled; the prolonged tip (beak) of the seed is short.

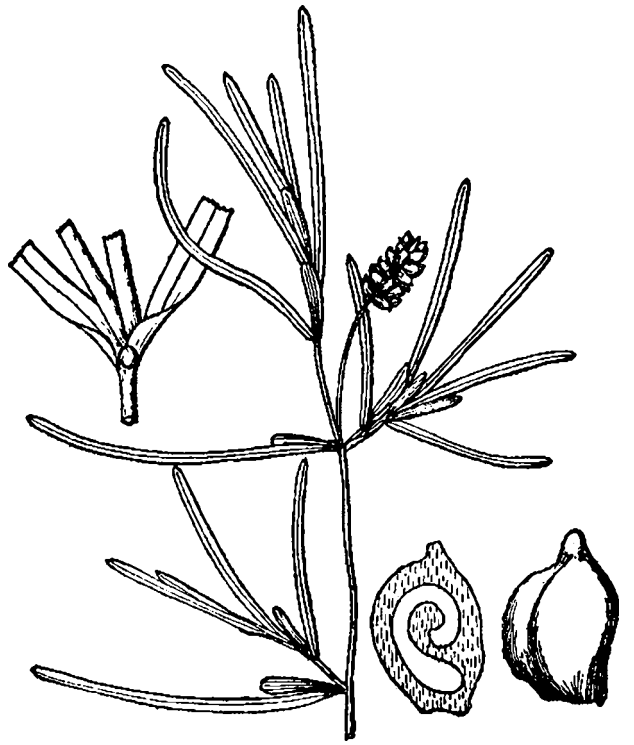
Identification Tips: Within its range in Washington, *P. obtusifolius* is most closely related to *P. berchtoldii*. Both taxa are completely submerged. *P. obtusifolius* has stems that are up to 39 in. (100 cm) long, while the stems *of P. berchtoldii* are up to 16 in. (40 cm) long. The leaves of the two taxa also differ in size and shape. The leaves of *P. obtusifolius* are 1-1/8 to 3-1/8 in. (3-8 cm) long by 1/8 in. (2-4 mm) wide, with rounded tips, while the leaves of *P. berchtoldii* are 2½ in. (6-7 cm) long by 1/16 in. (.5-2 mm) wide, with blunt tips. The stipules of *P. obtusifolius* have overlapping margins that are not bordered by glands, while the stipules of *P. berchtoldii* also have overlapping margins, but are bordered by small globose glands. Both taxa have spike-like inflorescences that vary in size. Fruits are important in distinguishing between the taxa. *P. obtusifolius* has egg-shaped fruits that are 1/8 in. (3-4 mm) long. *P. berchtoldii* has almost rounded fruits that are 1/16 to 1/8 in. (1.5-2.8 mm) long. Use of a technical key is advised, as species of *Potamogeteon* are variable and difficult to identify. For reliable identification try to collect specimens with fruits.

Phenology: The species begins fruiting in August.

Range: The species occurs from Alaska circumpolar to Newfoundland, and south to Washington, D.C. on the east coast. In Washington state it is found in Mason, Skagit, San Juan, and Jefferson counties, with the closest populations in Montana. From there it extends east to Wyoming, Nebraska, Kansas, Minnesota, Wisconsin and Michigan.

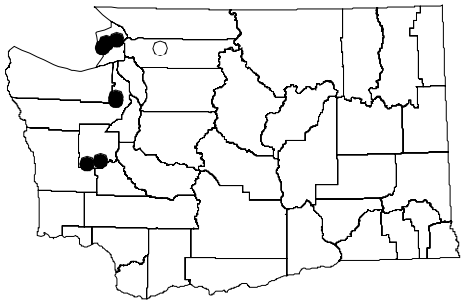
Potamogeton obtusifolius

blunt-leaf pondweed



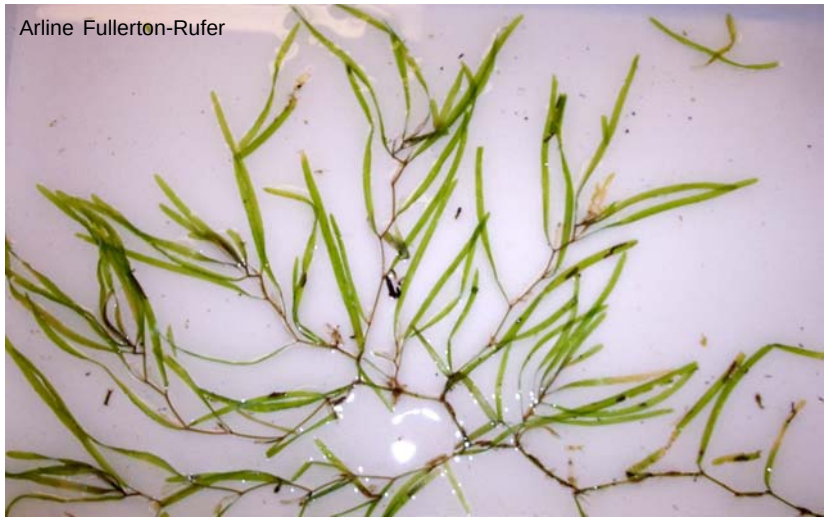
USDA-NRCS PLANTS Database / ***Britton, N.L., and A. Brown. 1913. Illustrated Flora of the Northern States and Canada. Vol. 1: 82.***

Known distribution of *Potamogeton obtusifolius* in Washington



● Current (1980+)
○ Historic (older than 1980)

Potamogeton obtusifolius
blunt-leaf pondweed



2005 Produced as part of a cooperative project between the Washington Department of Natural Resources, Washington Natural Heritage Program and the U.S.D.I. Bureau of Land Management. Persons needing this information in an alternative format, call (360) 902-1600 or TTY (360) 902-1125.

Potamogeton obtusifolius
blunt-leaf pondweed

Habitat: The species is typically found submerged on banks and in 3 to 9 feet (1-3.75 meters) of shallow water, from 100 to 513 feet (30-156 meters) elevation. Associated species at one or more sites include pondweeds (*Potamogeton* spp.), sedges (*Carex* spp.), pond-lily (*Nuphar* spp.), spireas (*Spiraea* spp.), rushes (*Juncus* spp.), horsetails (*Equisetum* spp.) and spikerushes (*Eleocharis* spp.).

Ecology: The species is found in lakes and sloughs. Hybridization is fairly common among the species of *Potamogeton*; therefore some specimens may be intermediate in morphology.

State Status Comments: There are fewer than ten occurrences of the species in Washington.

Inventory Needs: Known occurrence sites need to be thoroughly surveyed in August when in fruit. Mason, Skagit, San Juan and Jefferson counties should be systematically surveyed for additional populations.

Threats and Management Concerns: The habitat of the species faces changes from lakeside property owners who alter the shoreline and try to control aquatic plants with herbicide treatments.

References:

Douglas, G.W., G.B. Straley, D. Meidinger, and J. Pojar. 2001. *Illustrated Flora of British Columbia* vol. 7: *Monocotyledons (Orchidaceae Through Zosteraceae)*. Ministry of Environment, Lands and Parks, Victoria, British Columbia. 379 pp.

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1969. *Vascular Plants of the Pacific Northwest* Part 1: *Vascular Cryptogams, Gymnosperms, and Monocotyledons.* University of Washington Press, Seattle, WA. 914 pp.

2005 Produced as part of a cooperative project between the Washington Department of Natural Resources, Washington Natural Heritage Program and the U.S.D.I. Bureau of Land Management. Persons needing this information in an alternative format, call (360) 902-1600 or TTY (360) 902-1125.